

EDWARD J. MARKEY
7TH DISTRICT, MASSACHUSETTS

ENERGY AND COMMERCE COMMITTEE

RANKING MEMBER
SUBCOMMITTEE ON
TELECOMMUNICATIONS AND
THE INTERNET

SELECT COMMITTEE ON
HOMELAND SECURITY

RESOURCES COMMITTEE

Congress of the United States
House of Representatives
Washington, DC 20515-2107

November 7, 2003

2108 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-2107
(202) 225-2836

DISTRICT OFFICES:

5 HIGH STREET, SUITE 101
MEDFORD, MA 02155
(781) 396-2900

188 CONCORD STREET, SUITE 102
FRAMINGHAM, MA 01702
(508) 875-2900
www.house.gov/markey

The Honorable Pat Wood
Chairman
Federal Energy Regulatory Commission
Washington, D.C. 20426

Dear Mr. Chairman:

I am writing you regarding press reports suggesting that the Federal Energy Regulatory Commission has cited -- in at least one regulatory proceeding -- a Department of Energy funded or supported study which may understate the public safety consequences of a terrorist attack or an accident involving liquefied natural gas (LNG) tankers and Distrigas LNG facilities. This study was originally performed in connection with post-September 11th concerns raised about the safety and security of the Distrigas LNG terminal located in the City of Everett, which I represent.

Shortly after the September 11th terrorist attacks, the Department of Energy reportedly commissioned a study by Quest Consultants, Inc. regarding public safety issues relating to the transportation of LNG to the Distrigas facility and the storage of LNG at the facility. Secretary of Transportation Mineta wrote me about the study on October 26, 2001, noting that:

“Quest Consultants, Inc., has been hired by DOE [the Department of Energy] to perform studies related to security on vessels transporting LNG and on the onshore LNG storage tanks.”

On page 10 Secretary Mineta indicated that:

“Quest Consultants, an engineering firm, has been asked by DOE to perform a study to analyze the threat that could result from a five-meter diameter hole in an LNG tank on a vessel. Quest has performed some initial calculations to quantify the gas dispersion and fire scenarios that could follow a large release from the LNG storage tanks.”

Also on page 10, Secretary Mineta further stated that in addition to actions undertaken by the Department of Transportation to enhance security at the Distrigas facility, it was your understanding that:

"To improve security measures, DOE will work directly with the local law enforcement officials and Distrigas. MEMA [Massachusetts Emergency Management Agency] will review the studies performed by Quest and develop a plan of action. RSPA [the Department of Transportation's Research and Special Projects Administration] will be involved in the review of the onshore plant protection security features.

My office was subsequently provided with a copy of the Quest study and briefed on its contents. This Quest study, along with a study prepared for the facility operator by Lloyd's Register of Shipping, which my office was also provided, has been used by the federal government and the facility operator to reassure the residents of Everett and surrounding communities regarding the potential danger of a fire and explosion at or near the Distrigas facility to the residents of Everett and surrounding communities.

Recent press reports have called the accuracy of these studies into question and suggested that a more recent draft study being prepared by NOAA suggests that the public safety consequences of a terrorist attack or accident at or near the Distrigas facility could be far more severe.

Interestingly, an October 19, 2003 article in the Mobile Register quotes John Cornwell, the lead scientists on the Quest study of LNG fires, as distancing himself from some of the characterizations and uses of the Quest study, stating:

"Some of the modeling we did for DOE – in hindsight, we should have done a more complete paper. ...I've learned you never write anything you don't want public. We violated our own rules on that score."

The Register article goes on to report that Cornwell did the Quest study on short notice and that he was believed that it would be employed in-house by federal agencies as one of several tools used to examine LNG fire scenarios. However, according to the Register article:

"In Boston, the Quest study – which has never been published in scientific journals – was apparently used by the DOE to suggest that a terrorist attack on an LNG tanker would result in only limited damage immediately around the ship. In stark contrast, published scientific studies have suggested that an LNG fire could have disastrous consequences for densely populated neighborhoods around Boston Harbor."

I am writing you because the Register article has reported that "Department of Energy officials and Federal Energy Regulatory Commission Officials have promoted the Quest Consultants Inc. study as evidence that the public would have little to fear from any LNG tanker spills or resulting fires." The article goes on to report that "This year, the Federal Energy Regulatory Commission cited the Quest computations in its decision to allow a new LNG terminal at Hackberry, La, near Lake Charles."

Both the Register and Herald reports indicates that a forthcoming study by the National Oceanic and Atmospheric Administration (NOAA) indicates that the size of the fire that could result from a successful attack against an LNG tanker or LNG terminal could be far greater than that assumed by either the Quest Study or the Lloyd's study prepared for Distrigas. . According to an email my office have obtained that was written by William Lehr, the author of the NOAA study:

"The maximum emissive power of an LNG pool fire is several times more than we would expect from a regular oil fire. However, The thermal radiation received falls off rapidly as you move away from the fire. It decreases much faster for foggy days than for clear days. A common danger level for thermal radiation flux in an area of public assembly is 5 kilowatts per square meter. A person exposed to this level would feel considerable pain in a few seconds. A very large unconfined LNG pool fire could possibly produce thermal radiation effects at this level or above for more than a kilometer away from the center of the fire."

Interestingly, Department of Energy officials are now quoted in the aforementioned Mobile Register as denying any connection to the Quest Study, stating that the Department "did not commission or release the study" and was "not involved" with the study in any way. This is a rather bizarre and Orwellian rewriting of history.

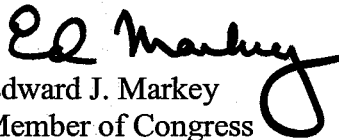
In light of this situation, I am writing you at this time to request your assistance and cooperation in responding to the following questions:

1. How has the Commission made use of the Quest Study in connection with its responsibilities regarding the siting and safety of LNG facilities and the transportation of LNG to such facilities? In your response please explain exactly how the Quest study has been used, including all regulatory proceedings, litigation, testimony, briefings or other occasions in which the study has been used or cited.
2. Does the Commission agree with the statement attributed in the press to Mr. John Cornwell, the lead scientist for the Quest study, that the Quest numbers are not appropriate "for many of the things they are being used for," including use in an Environmental Impact Statement for a proposed new LNG facility?
3. Did the Commission base any regulatory, oversight, or enforcement actions or decisions on the accident scenarios or accident consequences set forth in the Quest report or the Lloyd's report? If so, does the Commission intend to revisit any of those actions or decisions? If not, what other studies or analyses did the Commission base its post-September 11th actions or decisions upon?
4. The aforementioned press accounts raise serious questions about the adequacy of the Quest study, indicating that it has not been peer reviewed and is contradicted by other scientific studies of LNG fires and explosions. Are you familiar with these concerns that have been raised about this non-peer reviewed study, and if so, do you believe that such a non-peer reviewed study should not be used as a basis for policy decisions by the FERC with respect to LNG siting or LNG safety?

5. The aforementioned press reports also indicate that a draft NOAA study projects hypothetical LNG fires that are much larger than those projected in either the Quest or Lloyd's reports. According to the Herald, "NOAA's study...generally sides with a more devastating scenario long portrayed by Massachusetts Institute of Technology emeritus James Fay, said Bill Leher, a researcher on the NOAA study." The Register article further suggests that the NOAA study may be more in line with other scientific studies that have been done on this subject. Are you familiar with the NOAA study? Do you agree or disagree with its conclusions? Do you agree or disagree that the NOAA study, and the Fay studies, appear to be more in line with the scientific and technical literature on this subject. If you agree, please indicate whether you intend to make any changes in the Commission's oversight or regulatory policies or actions based on this new study. If you disagree, please explain the basis for your disagreement.

Thanks again for your cooperation in this matter. I request that a response to this inquiry be provided to me within 10 working days, or no later than November 24, 2003. If you have any questions about this matter, please have your contact Mr. Jeff Duncan of my staff at 202-225-2836.

Sincerely,


Edward J. Markey
Member of Congress